### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015251 Address: 333 Burma Road **Date Inspected:** 24-Jun-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 630 **Project Name:** SAS Superstructure Prime Contractor: American Bridge/Fluor Enterprises, a JV **OSM Departure Time:** 1500 Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

**CWI Name:** Yes No Bernard Docena, Jesse Cayabyab SiW McSentnell **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Weld Procedures Followed: Electrode to specification:** No Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: SAS OBG** 

### **Summary of Items Observed:**

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above. The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified 4E/5E-C1, 2W/3W-C and the following observations were made:

# 4E/5E-C1

Upon the arrival of the QA Inspector it was observed ABF welder was setting up the flux cored arc welding (FCAW) machine to begin the FCAW root pass. The QA Inspector performed random visual testing of the fit up and noted it appeared to be in general compliance with the contract requirements. The QA Inspector randomly observed the ABF welder Song Tao Huang had previously started the induction heating blankets to ensure the minimum required preheat of 150°F was achieved prior to welding. The QA Inspector randomly verified utilizing a 150°F temperature indicating marker and noted the minimum required preheat had been achieved. The QA Inspector randomly observed the SE QC Inspector identified as Bernard Docena set the FCAW machine to the parameters of the approved WPS. The QA Inspector randomly observed the FCAW parameters were 240 Amps 23. 8 Volts and a travel speed of 310mm/min. The QA Inspector randomly observed the ABF welder Song Toa Huang begin the FCAW root/fill pass of the top 900mm of the above identified weld joint by hand. The QA Inspector noted the FCAW parameters appeared to be in general compliance 3042-B-1. The QA Inspector noted the ABF welder spent the remainder of the shift performing the FCAW fill/cover pass.

### 2W/3W-C1/C2

The QA Inspector randomly observed the QC Inspector Tom Pasqualone monitoring the ABF welders James Zhen and Jin Quan Huang grinding and excavating the Ultrasonic testing (UT) rejections previously located and

## WELDING INSPECTION REPORT

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indicated. The QA Inspector noted the weld segment C1 appeared to have 3 UT rejections previously indicated by the QC Inspector Tom Pasqualone. The QA Inspector noted the weld segment C2 appeared to have 5 UT rejections previously indicated by the QC Inspector Tom Pasqualone. The QA Inspector noted no welding was performed on the QA Inspectors shift on this date. The QA Inspector observed only grinding was performed on today's date.

The QA Inspector Bert Madison was on site with the QA Inspector Rick Bettencourt in the AM for a brief tour and a run down of the nomenclature of the East and West bound bridge segments. The QA Inspector Bert Madison stayed in the field while the QA Inspector Rick Bettencourt spent the remainder of the shift researching and updating the ABF production welding tracking chart and logbook.

## **Summary of Conversations:**

As noted above.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916)-813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Bettencourt,Rick	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer